CEQA Scoping Meeting Proposed Basin Plan Amendment to Implement the Early Life Stages Provision of the July 2003 Ammonia Objectives

November 3, 2003
Los Angeles Regional Water Quality
Control Board

Outline of Presentation

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- Other Concerns

Purpose of Public Workshop

- Inform interested persons of proposed amendment
- Solicit input on the appropriate scope and content of the Basin Plan amendment
 - s.t. CEQA requirements, including CEQA Scoping (CCR section 15083) — "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed..."

Purpose of Amendment

To revise the Implementation Procedures for the Early Life Stage Provision of the July 2003 Basin Plan Amendment to "Update the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for protection of "Aquatic Life"."

Background

On April 25, 2002, the Los Angeles Regional Water Quality Control Board adopted a Basin Plan Amendment updating the freshwater ambient objectives for ammonia based on guidance from U.S. EPA. The U.S. EPA guidance is entitled "1999 Update of Ambient Water Quality Criteria for Ammonia," December 1999.

Background on Existing Objectives

The existing objectives vary depending on temperature and pH and based on various conditions, including: salmonids present, salmonids absent, early life stages (ELS) present, or early life stages (ELS) absent.

Necessity of ELS Provision

Early life stages of fish are more sensitive to ammonia at temps below 15 degrees C (59 degrees F); therefore, if they are present in a water body the chronic objective is more stringent at temps below 15 C.

Definition of ELS

The early life stages include the pre-hatch embryonic period, the post-hatch free embryo or yolk-sac fry, and the larval period, during which the organism feeds. The ELS does not include the juvenile stage. The duration of ELS starts at the beginning of spawning. The end of ELS varies per fish species.

Direction from Regional Board regarding ELS Provision

One of two provisions of the freshwater ammonia amendment that was unresolved at the April 25th board meeting was how to determine the location of Early Life Stages (ELS) of fish in our region. Regional Board Staff were charged by the Board with convening a Technical Advisory Committee (TAC) to guide Staff in this effort.

Proposed Action

Regional Board staff has selected a subset of water bodies upon which to focus (i.e. those to which large POTWs discharge).

The TAC was asked to identify among the subset those water bodies in which winter spawning occurs.

For these water bodies, ELS will be considered present all year and the ELS absent provision will not be allowed.

Proposed Action

For the rest of the select water bodies (i.e.those to which large POTWs discharge), Regional Board staff will specify start and end dates for the ELS absent provision based on historical spawning data for species present (at present or during any period since November 1975).

Proposed Action

- All remaining water bodies (those to which POTWs do not discharge) would be designated as ELS present year-round unless site-specific data demonstrate otherwise. Data requirements include:
 - the fish species distributions
 - spawning periods
 - nursery periods
 - duration of sensitive life stages
 - expert opinions from fisheries biologists and other scientists

- 1. Early Life Stages of fish assumed present year-round if the water body has the SPWN designation, unless a site-specific study justifies a seasonal provision.
 - USEPA recommended approach to use beneficial use designations.
 - problem that SPWN does not cover all water bodies in which ELS are present.

- 2. Early Life Stages of fish assumed present year-round if the water body has the <u>SPWN</u> and <u>COLD</u> designations, unless a site-specific study justified a seasonal provision.
 - SPWN most often is associated with the COLD beneficial use (for 83% of all water bodies). Therefore options 1 and 2 are nearly the same.

- 3. Allow exemption during timeframes of the year when sensitive life stages are most likely not to be present in numbers that, if chronic toxicity did occur, would affect the long-term success of the fish population.
 - simple to implement once the time-frame was selected.
 - nearly impossible to define a general start and end date for ELS fish of all species in all water bodies.

- 4. ELS Present At All Times In All Water Bodies
 - would be very protective.
 - would not give flexibility to dischargers where and when it may be appropriate.

- 5. For a select group of water bodies, i.e. those to which major POTWs discharge, determine whether there are winter spawning fish.
 - if there are, the ELS absent provision would not be allowed.
 - for the rest of the select water bodies, start and end dates for the ELS absent provision would be specified.
 - for the non-selected water bodies, ELS fish would be assumed present at all times, unless a site-specific study justified a seasonal provision.

Other Considerations

Regional Board Staff may consider deferring relaxation of chronic objectives from ELS present to absent where endangered species are known to be present, until conclusion of EPA's national consultation on ammonia.

Recommended Alternative

For a select group of water bodies, i.e. those to which major POTWs discharge, determine whether there are winter spawning fish.

- if there are, the ELS absent provision would not be allowed.
- for the rest of the select water bodies, start and end dates for the ELS absent provision will be specified.
- for the non-selected water bodies, ELS fish would be assumed present at all times, unless a site-specific study justified a seasonal provision.

Implementation Provisions

- 1. Regional Board staff have identified the subset of waters to which large POTWs discharge.
- 2. RB staff are in the process of determining whether winter spawning fish are present in this subset of waters based on:
 - input from the Technical Advisory Committee and
 - existing fish surveys.

Implementation Provisions

The implementation provisions described on the previous slide have been followed and the *preliminary* results are available.

Please see the attached handouts.

CEQA Concerns

Water: Change in the quantity or quality of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

Differences in concentration between the ELS present vs. ELS absent objectives are not great enough to effect water quality.

CEQA Concerns

Plant Life;
Change in the diversity of species, or number of any species of plants

Phytotoxicity is not an issue for ammonia.

CEQA Concerns

Animal Life

Change in the diversity of species, or numbers of any species of animals

Reduction in numbers of any unique, rare or endangered species of animals

Deterioration to existing fish or wildlife habitat

- The most sensitive fish test species were considered.
- A national consultation with U.S. Fish and Wildlife Service will determine impacts to unique, rare or endangered species.
- Unlikely.